



~~NORTHROP GRUMMAN~~

**Northrop Grumman Aerospace Systems Sector**  
Advanced Programs and Technology  
Battle Management and Engagement Systems  
Strike and Surveillance Systems  
Space Systems

**MASTER SUBCONTRACTING PLAN**  
For Small, Small Disadvantaged, Women-Owned, Historically Black Colleges and  
Universities/Minority Institutions, HUBZone, Veteran-Owned, Service-Disabled  
Veteran-Owned Small Business and Alaska Native Corporations Concerns

**Effective Date: 01 January 2013 to 31 January 2016**

**Sector Approval:**

(b) (6)

Date: 12/20/12

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## **DEFINITIONS**

**AbilityOne Program):** The AbilityOne Program is the largest source of employment for people who are blind or have other severe disabilities in the country. It coordinates participation with more than 600 nonprofit agencies throughout the United States and represents \$2.3 billion in products and services purchased by the federal government. The Program operates at nearly 1,000 locations representing 40 government agencies nationally.

The AbilityOne Program is administered by the U.S. AbilityOne Commission, an independent federal agency, with assistance from NISH and National Industries for the Blind. For additional information about the Javits-Wagner-O'Day (JWOD) Act, the AbilityOne Program and the governmental guidelines, visit [www.abilityone.gov](http://www.abilityone.gov).

**Alaska Native Corporation (ANC):** Any Regional Corporation, Village Corporation, Urban Corporation, or Group Corporation organized under the laws of the state of Alaska in accordance with the Alaska Native Claims Settlement Act, as amended (43 U.S.C. 1601, et seq.) and which is considered a minority and economically disadvantaged concern under the criteria at 43 U.S.C. 1626(e)(1). This definition also includes ANC direct and indirect subsidiary corporations, joint ventures, and partnerships that meet the requirements of 43 U.S.C. 1626(e)(2).

**Central Contractor Registration (CCR):** A national Internet database administered by the Small Business Administration that contains supplier profiles of small, disadvantaged, 8(a), women-owned small businesses, HUBZone small business, veteran-owned and service-disabled veteran-owned small businesses.

**Systems For Award Management (SAM):** A national Internet database administered by the Small Business Administration that contains supplier profiles of small, disadvantaged, 8(a), women-owned small businesses, HUBZone small business, veteran-owned and service-disabled veteran-owned small businesses.

**Commercial Plan:** A subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (i.e., division, plant, or product line).

**Historically Black Colleges and Universities (HBCUs):** Institutions that have been determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. The term also means any non-profit research institution that was an integral part of such colleges or universities before November 14, 198.

**HUBZone Small Business Concern (HUBZone):** A small business concern that is owned and controlled only by United States citizens with the principal office located in a HUBZone and with at least 35 percent of the employees residing in a HUBZone. All HUBZones must receive certification by the Small Business Administration.

**Indian Tribe:** Any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act (43 U.S.C.A. 1601 et seq.), that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs in accordance with 25 U.S.C. 1452(c). This definition also includes Indian-owned economic enterprises that meet the requirements of 25 U.S.C. 1452(e). **Individual Subcontracting Plan:** A subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract and has goals that are based on planned subcontracting dollars or contract value, in support of the

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specific contract. The plan may include indirect costs incurred for common or joint purposes and may be allocated on a prorated basis to the contract.

**Master Plan:** A subcontracting plan that contains all the required elements of an individual subcontracting plan (excluding goals) and may be incorporated into individual subcontracting plans, provided the master plan has been approved.

**Minority Institutions (MIs):** Accredited colleges and universities with enrollment of a single minority group or a combination of minority groups that are under-represented in the science and engineering fields that exceeds 51 percent of their total enrollment

**Mentor-Protégé Program:** Federal government program which provides incentives to major prime contractors to assist SDB, WOSB, SDVOSB, HUBZone Small Business concern, and AbilityOne firms, which would enhance their capabilities of performing as prime contractors and subcontractors under various agency contracts. The program seeks to increase SDB and WOSB participation in federal government and commercial contracts. The program also encourages SDB and WOSB firms and prime contractors to establish long-term business relationships, free from both government interference and restrictions that exist in relationships between large and small businesses

**National Institution for Severely Handicapped (NISH).** An association for handicapped individuals. A handicapped individual is a person who has a physical, mental, or emotional impairment, defect, ailment, disease, or disability of a permanent nature that in any way limits the selection of any type of employment for which the person would otherwise be qualified.

**Service-Disabled Veteran-Owned Small Business (SDVOSB):** A small business that is at least 51 percent owned by one or more service-disabled veterans and in the case of any publicly owned business not less than 51 percent of the stock is owned by one or more service-disabled veterans. The management and daily business operations must be controlled by one or more service-disabled veterans or in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran

**Small Disadvantaged Business (SDB):** A small business that is at least 51 percent owned by an individual who is both a United States citizen and socially and economically disadvantaged, as defined by the Small Business Administration at 13 CFR part 124, where the majority of earnings directly accrue to the individual. To be a socially disadvantaged individual, one must possess at least one objective distinguishing feature that has contributed to social disadvantage, such as race, ethnic origin, gender, physical handicap, or long term residence in an environment isolated from the mainstream of American society. Members of the following designated groups are considered socially disadvantaged. African-Americans, Hispanic Americans, Native Americans (American Indians, Eskimos, Aleuts, or Native Hawaiians), Asian-Pacific Americans (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands (Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati,

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Tuvalu, or Nauru). Subcontinent Asian-American (Asian-Indian – persons whose origins are from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal) and other groups that the SBA may designate. A non-designated group must establish individual social disadvantage based on a "preponderance of the evidence."

Economic disadvantage is defined as net worth below \$750,000, minus equity in a primary residence and the applicant's ownership interest.

**Disadvantaged Businesses**

As you may already know, disadvantaged businesses can compete for certain federal contracting opportunities. You qualify for these specific opportunities if you "self-certify" your business as:

- Veteran-owned; Woman-owned; Minority-owned; and Owned by a person with disabilities

Collectively, these characteristics identify what is called a **disadvantaged business**. When you register your business in the [www.sba.gov/procurement/hubzone](http://www.sba.gov/procurement/hubzone), **System for Award Management (SAM)** is a **Federal Government owned and operated** free web site that consolidates the capabilities in CCR/Federal Regulations, ORCA, and EPLS. Future phases of SAM will add the capabilities of other systems used in Federal procurement and awards processes. you may also self-identify as belonging to one or more of these groups.

In the past, SBA managed the Small Disadvantaged Business Certification (SDB) program, which allowed business owners to certify their businesses as disadvantaged in order to compete for certain federal contracting opportunities. The SDB program was discontinued on October 1, 2008, and replaced with the self-certification process.

In addition to self-identifying your business as disadvantaged, the federal government has programs that help small businesses owned, operated, and actively managed by women, minority group members, veterans or persons with disabilities compete in the marketplace. Visit these links to learn more about these programs:

SBA's [Small Business Development Center](http://www.sba.gov/procurement/hubzone) provides assistance services that help small disadvantaged businesses gain access the federal procurement market.

SBA's [HUBZone](http://www.sba.gov/procurement/hubzone) program helps small businesses in urban and rural communities gain preferential access to federal procurement opportunities. These preferences go to small businesses that obtain HUBZone certification in part by employing staff who live in a HUBZone. The company must also maintain a "principal office" in one of these specially designated areas.

**WOMEN-OWNED BUS.**

Resources to help women-owned businesses find and bid on federal government contracting opportunities.

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Section 1: Women-Owned Small Business (WOSB)  
Tips and advice from SBA to help women-owned businesses bid on federal contracting opportunities.

Veteran-Owned Small Business (VOSB)

Provides general business assistance, federal contracting assistance and other outreach services to help veteran-owned businesses.

**Women-Owned Small Business (WOSB):** A small business that is at least 51 percent owned by one or more women and in the case of any publicly owned business, at least 51 percent of the stock is owned by one or more women. One or more women must control the management and daily business operations.

**Veteran-Owned Small Business (VOSB):** A small business that is at least 51 percent owned by one or more veterans and in the case of any publicly owned business, at least 51 percent of the stock is owned by one or more veterans. One or more veterans must control the management and daily business operations.

**INTRODUCTION**

It is Northrop Grumman Aerospace Systems Sector's policy to actively support this effort by giving small businesses the maximum practicable opportunity to participate in Northrop Grumman Aerospace Systems Sector's procurement process and to exert special efforts to bring SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs, into the mainstream of business as viable suppliers in support of the intent of Public Law 95-507.

Northrop Grumman Aerospace Systems Sector fully endorses the Federal Government's laws and initiatives which are designed to enhance and increase participation of SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs, and ANCs; additionally SBIR/STTR and AbilityOne in the government contracting process.

**SPECIAL INITIATIVE FOR HUBZONE AND SDVOSB:**

**HUBZone Small Business**

During GFY '13 through GFY'16 NGC-AS will review and revisit those HUBZone suppliers that were displaced, grow to large business status or were reclassified due to the 2010 Census data and redirect of certain business zones. We will review previous HUBZone suppliers and matched against the new HUBZone data for identification purposes. During GFY '13, Northrop Grumman will contact those suppliers whose still reside in a HUBZone and request them to re-register for certification if they meet all the requirements to re-certify. This will assist Northrop Grumman in increasing our commitments to HUBZone and SDVOSB participants.

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**Service-Disabled Veteran Owned Small Business**

During GFY '13 through GFY'16 NGC-AS SEBP Office will review all current VOSB suppliers to understand if any qualify for SDVOSB certification status. As a follow-on to this initiative, the SEBP Office will ask all SDVOSB suppliers that contract NGC-AS to register with the United State Department of Veteran Affairs in Washington, D.C

NGC-AS will co-sponsor a HUBZone and SDVOSB targeted outreach conference with our sister sectors on the East and West Coast in 2013 and 2015; we will continue to support and co-sponsor the National Service Disable Veteran Conference on an annual basis GFY'13 – '16. In GFY'13 – '16 NGC-AS will assess and evaluate potential programs and indirect needs and review procurements to large business for possible re-direct to HUBZone and SDVOSB suppliers to the maximum practicable opportunities. NGC-AS will continue working with DCMA, SBA, US Department of Veteran Affairs, and other small business councils to maintain updated list of HUBZone and SDVOSB suppliers. Our plans will include review potential HUBZone's and /SDVOSB's for possible Mentor-Protégé Agreements and SBIR/STTR. These areas of focus will assist Northrop Grumman in increasing our commitments to HUBZone and SDVOSB suppliers.

As a large systems integrator NGC-AS sector was impacted by the 2012 Census data which redirected/rezoned over 25,000 HUBZone suppliers. During GFY'12 we realized a reduction in the following categories as noted in the table below. A number of small businesses closed, sold, or grow to large business categories. The 2010 census data impact the current HUBZone suppliers reclassified and removed from HUBZone classification code. Losing small business credit – caused growing outside their size standard and no feeder suppliers in line to assist in underutilized business categories

Example: US Tool Grinding – over \$18M now large business

SIZE STATUS	NO OF SUPPLIERS IN 2011	COMM IN 2011	NO OF SUPPLIERS IN 2012	COMM IN 2012	DECREASE IN SUPPLIERS IN 2012	DECREASE IN COMM 2011 – 2012
HUBZone SB	68	\$ 46.8	45	\$14.7	(23)	(\$32.1)
SDBs	173	\$132.2	146	\$89.8	(23)	(\$42.4)
SDVOSB	42	\$ 11.5	32	\$ 4.6	(10)	(\$ 6.9)

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		GFY 12	GFY 11	GFY 10	GFY 09	GFY 08	AVERAGE
DOD Compare		Overall AS DOD Spend	Overall AS DOD Spend	Overall AS DOD Spend	Overall AS DOD Spend	Overall AS DOD Spend	Overall AS DOD Spend GFY 2012 - 2008
Bus. Size	Star (Goal) %						
Small	23.0%	27.8%	25.5%	21.4%	28.0%	23.6%	25.7%
SDV	5.0%	4.6%	4.7%	4.7%	5.0%	3.4%	4.6%
WOSB	5.0%	6.2%	5.8%	5.6%	8.6%	5.4%	6.3%
HUBZone	3.0%	0.6%	1.7%	1.4%	2.7%	1.5%	1.6%
VOSB		2.1%	3.0%	3.5%	3.6%	3.9%	3.2%
SDVOSB	3.0%	0.2%	0.4%	0.4%	1.5%	0.2%	0.5%
NA		0.2%	0.8%	1.4%	0.6%	1.5%	0.4%

**Proposed Goals for HUBZone and SDVOSB Improvement Plan**

DOD Compare		GFY 13	GFY 14	GFY 15	GFY 16	GFY 17	GFY 18
		DOD	DOD	DOD	DOD	DOD	DOD
HUBZone	3.0%	0.8%	1.0%	1.0%	1.7%	2.0%	2.5%
SDVOSB	3.0%	0.4%	0.6%	0.8%	1.0%	1.2%	1.4%

In order to fully comply with Public Law 95-507 – Amendments to the Small Business Investment Act of 1978; Public Law 99-661 – Defense Authorization Act of 1987; Public Law 85-536 – Small Business Act, as amended; Public Law 100-180 – Department of Defense Authorization Act of 1988 (extends P.L. 99-661); Public Law 100-656 – Business Opportunity Development Reform Act of 1988/1989; Public Law 102-484 – Department of Defense Authorization Act of 1993; Public Law 106-50 – Veterans Entrepreneurship and Small Business Development Act of 1999; Public Law 105-135 – HUBZone Act of 1997/Small Business Reauthorization Act of 1997 and Public Law 103-355 – Federal Acquisition Streamlining Act of 1994, Northrop Grumman Corporation, Aerospace Systems Sector, herein submits this Master Subcontracting Plan required by the Federal Acquisition Regulation (FAR) 52.219-9 and FAR Subpart 19.7 et. seq. This Master Subcontracting Plan, when approved, shall be incorporated by reference as a part of an individual subcontracting plan submitted for government contracts exceeding \$650,000 that provide further subcontracting opportunities. For contracts containing options, the cumulative value of the basic contract and all options is considered in determining whether a subcontracting plan is necessary. If a plan is necessary, the individual subcontracting plan will contain all of the elements required by FAR 19.704(a) and will contain separate parts: one for the basic contract and one for each option. Each business section is in response to a requirement in FAR 52.219-9.

All Northrop Grumman personnel involved in the procurement process will be indoctrinated to be sensitive to our obligations and to be alert for subcontracting opportunities to such concerns. Additionally, Northrop Grumman Aerospace Systems Sector will participate in Small Business training workshops, federal and private sector procurement conferences, seminars and trade fairs in furtherance of the government's



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small business requirements. The responsibility for implementation of these programs is created by Northrop Grumman Corporate, Small Business Liaison Officers, Program Vice Presidents, Department Directors and all those in supervisory positions.

This Master Subcontracting Plan will be updated as necessary to reflect any changes implemented by Federal Regulations in accordance with FAR 19.70 (b).

**NGC-AS Business Units – Cage Codes and DUNS Numbers**

<b>Entity (NGC-AS Business Unit)</b>	<b>CAGE Code Number</b>	<b>DUNS Number</b>
<b>Northrop Grumman Systems Corporation</b>	<b>06892</b>	
Bethpage, NY (includes Hollywood, MD)	26512, 2AAU9	077652761
El Segundo, CA	76823	938535028
Melbourne, FL (includes Warner Robbins, GA)	70974	152670030
Palmdale, CA	1W025	362686958
Rancho Bernardo, CA	77646, 78022	100618869
Redondo Beach, CA	11982	008324344
St. Augustine, FL	61174	196602866

**PRINCIPAL SUPPLIES/SERVICES TO BE SUBCONTRACTED**

The principal supplies and services to be subcontracted are listed below. NGC-AS goal is to subcontract with all small business concerns in all potential North American Industry Classification System (NAICS) categories to the maximum extent possible.

Potential principle products areas to be subcontracted in support of our products include, but are not limited to:

<b>Commodity/Service</b>	<b>Small</b>	<b>SDB (includes HBCU/MB)</b>	<b>WOSB</b>	<b>HUBZONE</b>	<b>Veteran</b>	<b>Service Disabled Veteran</b>	<b>NAICS</b>
Facilities Service Agreements	x	x	x	x	x	x	x
Software Development	x	x	x	x	x	x	x
System Integration	x	x	x	x	x	x	x
Design & Production of Test Equipment	x	x	x	x	x	x	x
Electro-Mechanical Components	x	x	x	x	x	x	x
Mechanical Fabrication	x	x	x	x	x	x	x
Electronic Components & Assemblies	x	x	x	x	x	x	x
High Reliability Electronics	x	x	x	x	x	x	x
Facilities Services	x	x	x	x	x	x	x
Custom Active Electronics Devices	x	x	x	x	x	x	x

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Commodity/Service	Small	SDB (includes HBCU/MI)	WOSB	HUBZONE	Veteran	Service Disabled Veteran	ANC
Standard Electronics Devices	x	x	x	x	x	x	x
Test Equipment	x	x	x	x	x	x	x
Casting/Forgings	x	x	x	x	x	x	x
Machined Parts/Raw Material	x	x	x	x	x	x	x
Sheet Metal Parts	x	x	x	x	x	x	x
Fixed Assets and Capital Equipment	x	x	x	x	x	x	x
Maintenance Repair and Operating Supplies	x	x	x	x	x	x	x
Aircraft Hardware	x	x	x	x	x	x	x
Avionics	x	x	x	x	x	x	x
Airborne Mechanical Equipment	x	x	x	x	x	x	x
Structures	x	x	x	x	x	x	x
Subsystems	x	x	x	x	x	x	x
Major Systems	x	x	x	x	x	x	x
Wire Harnesses and Cable Assemblies	x	x	x	x	x	x	x

**GOAL DEVELOPMENT**

Compliance with the intent of Public Laws 95-507, 99-661, 100-180, 101-144 and 100-656, require goals to be established for the maximum practicable opportunities based on the potential that may exist for SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs.

In establishing goals, Northrop Grumman Aerospace Systems Sector will review potential awards to SBs, SDBs, WOSBs, HUBZones, VOSBs, SDVOSBs and ANCs not utilized in the past, and goals will reflect this endeavor wherever possible. Indirect SBs, SDBs, WOSBs, HUBZones, VOSBs, SDVOSBs and ANCs will be included in the goals and further addressed in Paragraph (6), Indirect Costs. HBCUs/MIs, where applicable to individual Subcontracting Plans, will be reflected and included in the SDB goals.

This is accomplished in the following manner:

1. Review past history of similar buys and identify whether the award went to Large Businesses, SBs, SDBs, WOSBs, HUBZones, VOSBs, SDVOSBs and ANCs
2. Buys identified to large business are reviewed to determine whether they fall within the potential of known SBs, SDBs, WOSBs, HUBZones, VOSBs, SDVOSBs and ANCs and goals are established accordingly.

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3. High-dollar list for each proposal, not previously procured will be reviewed by the business area SBLO and knowledgeable purchasing personnel to identify whether there is potential for utilization of SBs, SDBs, WOSBs, HUBZones, VOSBs, SDVOSBs and ANCs.
4. For material items not on the high-dollar list, Northrop Grumman Aerospace Systems Sector will apply percentage figures for SBs, SDBs, WOSBs, HUBZones, VOSBs, SDVOSBs and ANCs which have been statistically derived from previous activity.

**IDENTIFICATION AND DEVELOPMENT OF POTENTIAL SOURCES**

Northrop Grumman Aerospace Systems Sector will continue to build upon its long established tradition of working with small and minority development associations, through its Outreach Program in order to develop a valid and dynamic source list. In addition to participating in qualified small businesses procurement conferences, Socio-Economic Business Programs Office representatives and procurement personnel attend trade fairs and community development programs for SBs, SDBs, WOSBs, HUBZones, VOSBs, SDVOSBs and ANCs.

Database sources utilized to locate SB, SDB, WOSB, HUBZone, VOSB, SDVOSB and ANC suppliers include:

- U.S. Small Business Administration's Dynamic Small Business Search – <http://www.sba.gov/dsbs>
- System for Award Management (SAM) – <http://www.sam.gov>
- Center for Veterans Enterprise – <http://www.cve.com>
- Supplier Directories – All currently approved Northrop Grumman Aerospace Systems Sector suppliers (coded by business size and continually updated)
- Northrop Grumman Aerospace Systems Small Business Database – <http://www.northropgrumman.com/procurement/SmallBusinessDatabase>

Customer Website Sources include:

- NASA Office of Small and Disadvantaged Business Utilization – <http://www.nasa.gov/osdpu>
- DoD Western Regional Council for Small Businesses Utilization and Advocacy – <http://www.dodwrc.org>

New sources are also generated through Northrop Grumman Aerospace Systems Sector's participation in the following SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC Trade Associations and/or conferences:

- U.S. Small Business Administration – <http://www.sba.gov>
- U.S. Department of Veteran Affairs – <http://www.va.gov>

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- Department of Defense Small Business Innovation Research – <http://www.dodsbir.net>
- Department of Defense Mentor-Protege Program – <http://www.dod.mprp.org>
- Southern California Minority Business Development Council Purchasing Directory – <http://www.scmdbc.org>
- Asian Business Association – <http://www.asiabiz.org>
- Latin Business Association – <http://www.latinbiz.org>
- Black Business Association – <http://www.blackbiz.org>
- Greater Los Angeles African-American Chamber of Commerce – <http://www.glaaacc.org>
- Association of Black Women Entrepreneurs
- DoD Western Regional Council for Small Business Utilization and Advocacy SDB/WOSB directory – <http://www.dod.wrc.org>
- Florida Regional Minority Business Council – <http://www.flrbmc.org>
- Southern Florida Minority Supplier Development Council – <http://www.sfmdbc.org>
- Florida National Minority Supplier Development Council – <http://www.flnsdbc.org>
- Central North Florida Minority Supplier Development Council – <http://www.cnmdbc.org>
- AF Manufacturing Technical Assistance Production Program (MTAPP) – <http://dod.manufacturing.org>
- NAVAIR Naval Air Systems Command – <http://www.navair.org>
- New York New Jersey Minority Supplier Development Council – <http://www.nynjcoucilexpo.com/>
- Florida A&M University – <http://www.flam.edu>
- Supplier Diversity Marketplace (Alternately Co-Sponsored Annually by Northrop Grumman, Boeing, Lockheed Martin and Raytheon)
- National Center for American Indian Enterprise Development – <http://www.ncaeed.org>
- National Association of Women Business Owners <http://www.nawbo.org>

The primary sources utilized to locate HBCUs/MIs are the White House Initiative on Historically Black colleges and University - <http://www.whitehouse.gov/initiative/hbcu> and the National Center for Minority Enterprise Development - <http://www.ncmed.org>

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and a Special Certificate of Authorization, Approved for Release under Executive Order 12958, and the Master Subcontracting Information System (MSIS).

**SUBCONTRACTING PLAN DETAILS**

This Master Subcontracting Plan is established under FAR 52.219-9(d) and is fully compliant to FAR 52.219-9.

NOTE Certain entities within Northrop Grumman Corporation may elect to submit other approved Subcontracting Plans in support of specific proposal activities.

The following address FAR 52.219-9(d) by order of paragraph:

**1. PERCENT GOALS**

Percent goals for each individual contract action, as required, are shown on its "Individual Subcontracting Plan" addendum.

**2. STATEMENT OF PLANNED SUBCONTRACTING DOLLARS**

Dollars planned to be subcontracted to SB, SDB, HBCUs/MIs, WOSB, HUBZone, VOSB, SDVOSB and ANC concerns and the total are shown on the "Individual Subcontracting Plan" addendum.

**UTILIZATION OF INDIRECT COSTS**

In addition to specific direct goals expressed in terms of SB, SDB, WOSB, HBCU, MI, HZBC SDVOSB, and VOSB percentages of total planned subcontracting dollars, this plan includes all subcontracts that contribute to contract performance, as well as a proportionate share of products and services that are normally procured as indirect costs. Defense Contract Audit Agency and Defense Logistics Agency approved our methodology of calculating indirect costs on 27 October 2003.

The method used for calculating indirect costs is as follows:

- a. Obtain the estimated total sales (TS) for the applicable sector for the upcoming calendar year.
- b. Determine the actual indirect dollar value spent for the previous twelve-month period by business category. Utilize this data to forecast the value of indirect expenditures for the upcoming six-month periods.
- c. The estimated contract value (ECV) for each program is divided by the estimated sector sales (TS) for the calendar year.

$$ECV/TS = X\%$$

- d. Multiply NGC-AS forecasted small business category indirect (SBI) commitment for the calendar year by X%.
- e. (CY 20XX SBI) (X%) = Small Business Indirect

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**ADMINISTRATION OF THE MASTER SUBCONTRACTING PLAN**

**Ms. Vicky W. Harper-Hall  
Sector Manager, Socio-Economic  
Business Programs and Government Relations  
Northrop Grumman Corporation  
Aerospace Systems Sector  
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Sector Procedure PO-0506 states it is the policy of the Aerospace Systems Sector to increase procurement opportunities for capable SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC concerns. The Northrop Grumman Corporate office has issued a Memorandum, dated May 1, 2007, which directs all sectors to ensure full compliance with the Small Business Operating Plan and Public Law 95-507, United States code, Volume 5, Section 631 et seq.

**DUTIES OF THE ADMINSTRATOR**

The Socio-Economic Business Programs Office and site Small Business Liaison Officers (SBLOs), as directed in Northrop Grumman Aerospace Systems Sector Procedure No. PO-0506 shall perform the following duties on behalf of the sector:

- 1 Meet with representatives of subject firms to counsel and discuss subcontracting opportunities.
  - a Provide representatives with information and direction about current procurement requirements and appropriate contacts with procurement representatives.
  - b Arrange for technical and administrative assistance to subject firms when requested or required
  - c Establish supplier meetings with Procurement and Technical personnel to enable suppliers to present their company's capabilities.
- 2 Review and approve Subcontracting Plans or certificates from large business suppliers, maintain files of approved plans and provide them to buyers
- 3 Upon request from Contracts, develop a Subcontracting Plan. Submit completed plan to the cognizant Contract Administrator for submission to the customer. If required, assist Contracts in the negotiation of the plan. Monitor goal achievement on all Aerospace Systems Sector approved subcontracting plans from inception through contract completion. Prepare government required

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reports on a contract-by-contract basis of all Northrop Grumman Aerospace Systems approved subcontracting plans. Forward status reports to local DCMA office.

4. Act as local points for Government agencies, small business associations, etc., and serve as Northrop Grumman's representatives on various community and industry committees. Coordinate facility review of subject concerns with appropriate Procurement suppliers, Supplier Quality and Supplier Technical Services personnel, and participate in audits/surveys requested by government agencies.

The Socio-Economic Business Programs Office representatives serve on Commodity Management Teams (CMT) and Value Proposition Teams (VPT) with Procurement, Supplier Quality and Supplier Technical Services to leverage and consolidate a sector-wide supplier base to achieve our customer's requirements, in the most strategic manner possible.

5. Prepare required statistical reports, including eSRS (former SF 294 and 295 form), covering all purchase order and change order transactions for distribution to the customer and to corporate officers, subcontract management and procurement personnel, as required.
6. The Socio-Economic Business Programs Office representatives represent the Aerospace Systems Sector and the Corporate Socio-Economic Business Programs Office on Value Proposition Teams. Representatives from Global Supply Chain at the sector and corporate level review corporate spend for a variety of products and services and suppliers capable of supplying these products. These suppliers are evaluated from a quality, price and best value for consideration of obtaining a Corporate Award to provide these products and services to the entire corporation.

In addition, the Socio-Economic Business Programs Office representatives assist SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC concerns in the resolution of payment problems as well as provide consultation to suppliers who experience quality or delivery problems.

The Socio-Economic Business Programs Office representatives also act as liaisons between procurement organizations and potential suppliers. The representatives assist buyers in finding qualified potential suppliers and assist the suppliers in their attempt to become Northrop Grumman Aerospace Systems Sector team members.

#### **TECHNICAL ASSISTANCE**

Northrop Grumman Aerospace Systems Sector will provide technical assistance as necessary to develop SBs, SDBs, WOSB, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs in the following areas:

1. Bidder's conferences to discuss and advice on specifications, statements of work, and interpretation of requirements.

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2. Site surveys in the quality system area to evaluate systems and, as necessary, provide assistance to meet quality assurance requirements.
3. Post award assistance from Subcontract Management and Procurement and Supplier Quality field offices located in several geographic locations to ensure requirements are fully understood and to assist in purchase order performance, as required.
4. Financial assistance in the form of progress payments, where appropriate.
5. In-house small business symposia attended by engineering, manufacturing and facilities personnel to discuss and advise on new programs, problem areas and upcoming requirements.
6. Conduct symposia for SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC concerns in areas such as statistical process control, just-in-time and other advanced management, manufacturing and organizational development.

**RESTRICTED COMPETITION AND BIDDING**

Northrop Grumman Aerospace Systems Sector reserves the right to consider use of restricted bidding where the foregoing elements exist, and a requirement to facilitate SDB, HUBZone, SDVOSB and ANC participation in the procurement process is evident, i.e., (1) where overall achievement is low, and (2) where good faith progress is required. Restricted bidding may be utilized at sites where restricted competition will assist toward the achievement of goals.

**SUBCONTRACTING OPPORTUNITIES**

Northrop Grumman Aerospace Systems Sector is fully committed to providing an equitable opportunity for SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs to compete for subcontracts. The extra ordinary efforts used to provide this equitable opportunity includes.

1. Review of procurement documents to determine subcontract opportunities for SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC concerns. (See page 7, Goal Development)
2. Use of directories and databases to match SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC concerns capabilities with Northrop Grumman requirements. (See page 8, Identification and Development Potential Sources)
3. Counseling SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs on doing business with Northrop Grumman Aerospace Systems Sector. (See page 11, Administration of The Master Subcontracting Plan).



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4. Providing technical, administrative and financial assistance to SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs (See page 13, Technical Assistance).
5. Providing SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs, visibility to Northrop Grumman Aerospace Systems Sector procurement, management and user organizations through its Small Business Supplier Database, training sessions and procurement trade fairs. (See page 14, Restricted Competition and Bidding)
6. Encouraging the use of SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs through quarterly buyer recognition programs.

The production procurement requirements for Northrop Grumman Aerospace Systems Sector are categorized into the following commodity groups: purchased parts, standard parts, raw stock, castings and forgings, offsite machining support, major equipment items, major subsystems and research and development

Each Individual Subcontracting Plan identifies the principal supply and service areas where subcontracting opportunities exist for SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs. Should subcontracting opportunities for these concerns not exist, or be limited on a particular program, the Individual Subcontracting Plan will identify and explain the reason(s) for such limitations.

In addition to production requirements, the Northrop Grumman Aerospace Systems Sector procures many non-production related items and services. A representative listing of these items include: office furniture, office supplies, medical supplies, graphic supplies, maintenance equipment, computer hardware, software and associated items, construction of facilities, service contracts and maintenance and janitorial supplies.

Northrop Grumman Aerospace Systems Sector will provide assistance to SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs, in resolving payment problems, provide consultation to suppliers experiencing quality or delivery problems and as necessary, expand on loan of tooling, test equipment, engineering assistance, etc.

**Historically Black Colleges and Universities and Minority Institutions(HBCUs/MIs)**

Northrop Grumman Aerospace Systems Sector will make a best effort to use, whenever applicable or feasible, Historically Black Colleges and Universities and Minority Institutions (HBCUs/MIs). This will be accomplished by considering whether contemplated subcontracts will involve research or studies of the type normally performed by higher education institutions. If there is an opportunity available for higher educational institutions, then every attempt will be made to utilize an HBCU/MI.

Northrop Grumman Aerospace Systems Sector has donated, and will continue to donate, surplus equipment and furniture to several HBCUs/MIs.

Donations, grants, scholarships and other non-purchase order activity with HBCUs/MIs, will be included in the remarks section of the eSRS report

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**SBIR/STTR**

The Department of Defense (DoD) SBIR and STTR programs fund a billion dollars each year in early-stage R&D projects at small technology companies -- projects that serve a DoD need and have commercial applications. The SBIR Program provides up to \$1.1M for the concept and prototype stages (Phase I & II) of the program. Fund is provided directly to small technology companies (or individual entrepreneurs who form a company). The STTR Program provides up to \$850,000 in early-stage R&D funding directly to small companies working cooperatively with researchers at universities and other research institutions.

- Small companies retain the intellectual property rights to technologies they develop under these programs.
- Funding is awarded competitively, but the process is streamlined and user-friendly.
- Learn more by going to **Overview** and other sections. Also visit our Resource Center at [www.dodsbir.net](http://www.dodsbir.net).

**Mentor-Protégé Program**

Northrop Grumman Aerospace Systems Sector is currently in a DOD Mentor-Protégé Agreement with a certified Small Disadvantaged Business.

The Aerospace Systems Sector supports Mentor-Protégé agreements through subcontracts, donations of surplus equipment, training and technical assistance. Northrop Grumman Aerospace Systems Sector has a detailed developmental plan for each of its protégés. Additional protégés will be considered where feasible and applicable.

**Ability One Program**

Northrop Grumman Aerospace Systems Sector will make its best effort to utilize companies affiliated with the Ability One Program. This will be accomplished by considering the type of activity to be subcontracted and the potential pool of suppliers which are affiliated with the Ability One Program. If there is opportunity available in their areas of expertise, these companies will be considered whenever applicable or feasible.

Purchase order dollars will be included in the Small Business goals, as applicable. Other non-purchase order work with Ability One Program companies, which are not included in the goals, will be included in the remarks section of the SF 295 report.

**FLOWDOWN REQUIREMENTS**

All subcontracts exceeding \$10,000 contain Northrop Grumman Terms and Conditions that flow down the requirements for utilization of SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs. All subcontracts awarded over \$650,000 (except in the case of construction of a public facility, where the base amount is

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\$1,000,000), contain a clause requiring submission to Northrop Grumman Aerospace Systems Sector, of a Subcontracting Plan, a Certificate of Compliance or an Evidence of Participation in the Comprehensive Subcontract Test Program. For contracts containing options, the cumulative value of the basic contract and all options is considered in determining whether a subcontracting plan is necessary. If a plan is necessary, the Individual Subcontracting Plan will contain all the elements required by FAR 19.704 (a) and will contain separate parts: one for the basic contract and one for each option. When a subcontractor submits a Subcontracting Plan, the subcontractor will be required to adopt a Plan similar to the Plan agreed upon by the offeror in accordance with FAR 52.219-9 (d) (9). A file of Subcontracting Plans or Certificates of Compliance or other documentation submitted to Northrop Grumman Aerospace Systems Sector is maintained in the Socio-Economic Business Programs Office as well as with the appropriate purchase order file.

**SURVEYS AND REPORTS**

It is Northrop Grumman Aerospace Systems Sector's policy to cooperate with the Department of Defense, the U.S. Small Business Administration and other government agencies in responding to requests for information regarding Northrop Grumman Aerospace Systems Sector from SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs.

In accordance with applicable government regulations, Northrop Grumman Aerospace Systems Sector will continue to furnish reports and participate in surveys and audits requested by the U.S. Small Business Administration and federal procurement agencies to verify Northrop Grumman Aerospace Systems Sector compliance with current government regulations.

Computer programs have been developed to accommodate the reporting requirements of the U.S. Small Business Administration and federal procurement agencies to verify Northrop Grumman's compliance with current government regulations.

All procurement managers receive a report on a monthly basis indicating the dollars awarded to SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC concerns.

A monthly report provides a summary and detail of the subcontracts with SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs awards.

Northrop Grumman Aerospace Systems Sector will continue to furnish eSRS (former ISR/(formerly SF294 and SSR/(formerly SF295 form) reports in accordance with government requirements. An Individual Subcontract Report (ISR) is prepared for each active contract containing an approved subcontracting plan, and is submitted to the appropriate contracting agency, as well as the DCMA. A Summary Subcontracting Report (SSR) is submitted to the Department of Defense, NASA, DCMA and other applicable agencies as required. Respective Programs Offices also receive copies of this information.

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Northrop Grumman Aerospace Systems Sector will ensure that subcontractors agree to submit eSRS (formerly SF 294 and 295 forms) in accordance with Federal Regulations

**RECORDS**

Records of bid opportunities, award statistics, and contract compliance will be maintained in Northrop Grumman Aerospace Systems Sectors, and Subcontract Management and Procurement files.

The Aerospace Systems Sector purchase order includes documentation that indicates.

- a. Whether the award went to a large or SB, SDB, WOSB, HBCU/MI, HUBZone, VOSB, SDVOSB or ANC
- b. Whether one or more SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs were solicited
- c. The reason SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs were not solicited, if such was the case
- d. An explanation for the failure of a solicited SB, SDB, WOSB, HBCU/MI, HUBZone, VOSB, SDVOSB and ANC to receive the award, if such was the case.

All new suppliers are required to verify their business classification by completing Northrop Grumman Aerospace Systems Sector Supplier Capability Questionnaire (Form P0-F003). All active suppliers are required to verify their business classification by resubmitting Subcontractor Annual Compliance Certification (Form P0-F006) every year. The supplier information is maintained in an online database.

The Socio-Economic Business Programs Office at the respective sites also maintains records of:

- a. Contacts with SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC trade associations and business development associations
- b. Attendance at SB, SDB, WOSB, HBCUs/MIs, HUBZone, VOSB, SDVOSB and ANC business procurement conferences, trade fairs and other outreach activities
- c. Northrop Grumman Aerospace Systems Sector internal activities such as internal workshops, seminars, training programs, and supplier monitoring activities that are designed to guide and encourage buyers in the selection of SBs, SDBs, WOSBs, HBCUs/MIs, HUBZones, VOSBs, SDVOSBs and ANCs
- d. Individual Subcontracting Plans and/or certificates are filed with the appropriate subcontracting plan file, and the records for these plans are maintained on a contract-by-contract basis in the Socio-Economic Business Programs Office at the various sites.
- e. Subcontracting Plans from all large businesses that are contracted by Northrop Grumman Aerospace Systems Sector for \$650,000 or more

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**Make-or-Buy**

NGC-AS provides adequate and timely consideration of the capabilities of small business concerns in all "make-or-buy" decisions. A review of the applicable bill of material/equipment list for each project is made during the development phase of a contract. Proposal personnel ensure that adequate and timely consideration is given to small business concerns in all "make-or-buy" decisions. Procurement Manual, Make-or-Buy Program, allows small business concerns an opportunity to participate on "must buy" items, which are those items that have been identified for procurement from external sources. After contract award, all program and functional personnel are evaluated against NGC-AS commitment to the procurement policy and specific subcontracting plan to ensure proportionate amounts of subcontracts are awarded to the small business community.

**Misrepresentation [FAR 52.219-1 (d) (2)]:**

Notice is provided to our subcontractors in our general terms and conditions and internal procedures concerning penalties and remedies for misrepresentation of business status as small, small disadvantaged, women-owned small business, HUBZone small and service-disabled veteran-owned small business concerns for the purpose of obtaining a subcontract to be included as part or all of a goal contained in the subcontracting plan.

The general terms, conditions and internal procedures state that misrepresentation of a firm's status to obtain a contract shall be (i) punished by imposition of a fine, imprisonment, or both (ii) be subject to administrative remedies, including suspension and debarment or (iii) be ineligible for participation in programs conducted under the authority of the act.

**Effective Period of the Master Subcontracting Plan**

This Master Subcontracting Plan implements the provisions of Federal Acquisition Regulation (FAR) Subpart 19.7 and 52.219-9 as they apply to all categories of small business, except goals. Individual contract goals are addressed in the individual subcontracting plan. The approval signature on the cover page of this document by the divisional administrative contracting officer establishes that the master plan has been approved. NGC-AS ensures that the master plan is updated as necessary and will provide copies of the approved master plan, including evidence of its approval as required by the customer. Any goals and/or deviations from this master plan deemed necessary by the customer to satisfy the requirements of this contract will be indicated in the individual subcontracting plan. This plan is to be used by organizations within NGC-AS in performing contracts negotiated with the following agencies during the period 01 January 2013 through 31 January 2016.

•Department of Commerce

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- Department of Defense
- Department of Energy
- General Services Administration
- National Aeronautics and Space Administration
- Other State & Federal Customers

**ATTACHMENT C.****SMALL BUSINESS PARTICIPATION STATEMENT**

Northrop Grumman Systems Corporation, Aerospace Systems sector will continue to build upon its long established tradition of working with small and minority development associations, through its Outreach Program in order to develop a valid and dynamic source list. In addition to participating in qualified small businesses procurement conferences, Socio-Economic Business Program Office representatives and procurement personnel attend trade fairs and community development programs for SBs, SDBs, WOSBs, HUBZones, VOSBs, SDVOSBs, and ANCs.

Emphasis is placed on subcontracting work to companies that represent underutilized business categories (i.e., SB, SDB, WOSB, HUBZone, and SDVOSB). As a "best practice", NGSC AS sector will continue efforts and research to include all categories of Small Business concerns and will continue to seek maximum practicable subcontracting opportunities for SB, SDB, WOSB, HUBZone, and SDVOSB small business concerns.

It should be noted that the Individual Subcontracting Plan, incorporates the most current available Small Business categories, including Small, Small Disadvantaged, Women-Owned, HBCUs/MIs, HUBZone, Service-Disabled Veteran-Owned, Veteran-Owned, Native American, Alaskan Native Corporations and Indian Tribes.

## NORTHROP GRUMMAN SYSTEMS CORPORATION (NGSC) PATENTS

Patents					
Patent #	Inventor Names	Assignee Names	Filing Date	Patent Title	Ownership and Licensing Rights
6,317,257	Eric Lawrence Upton; Michael Gordon Wickham	Northrop Grumman Systems Corporation	Filed 04/20/00; Issued 11/13/01	Technique for Polarization Locking Optical Outputs	NGSC; no Gov't licensee
6,678,294	Hiroshi Komine; Stephen J. Brosnan; Michael G. Wickham	Northrop Grumman Systems Corporation	Filed 11/06/00; Issued 01/13/04	Distributed Feedback Laser Apparatus for Avoiding Stimulated Brillouin Scattering	NGSC; no Gov't licensee
7,584,628	George Manchester Harpole	Northrop Grumman Systems Corporation	Filed 06/29/06; Issued 09/08/09	System for Delivering Coolant to a Laser System	NGSC; no Gov't licensee
8,922,771	Gregory D. Goodno; Mark E. Weber; Stanley Benjamin Weiss, IV;	Northrop Grumman Systems Corporation	Filed 03/13/12; Issued 12/30/14	Multichannel polarization stabilizer	NGSC; no Gov't licensee
8,922,772	Gregory D. Goodno; Mark E. Weber; Stanley Benjamin Weiss, IV;	Northrop Grumman Systems Corporation	Filed 10/29/12; Issued 12/30/14	Multichannel polarization stabilization employing synchronous phase- locking methods	NGSC; no Gov't licensee
8,493,650	Joshua E. Rothenberg; Peter A. Thielen;	Northrop Grumman Systems Corporation	Filed 1/17/12; Issued 07/23/13	Method and apparatus for suppression of four-wave mixing using polarization control with a high power polarization maintaining fiber amplifier system	NGSC; no Gov't licensee
8,254,017	Robert R. Rice; Michael G. Wickham; Hiroshi Komine; Peter Livingston; Peter Thielen; Charles Phillip Asman;	Northrop Grumman Systems Corporation	Filed 03/19/09; Issued 08/28/12	Optical fiber amplifier and methods of making the same	NGSC; no Gov't licensee
8,184,361	Joshua Elliott Rothenberg; Eric Chiu Tat Cheung;	Northrop Grumman Systems Corporation	Filed 08/07/09; Issued 05/22/12	Integrated spectral and all-fiber coherent beam combination	NGSC; no Gov't licensee
8,830,566	Joshua Elliott Rothenberg; Eric Chiu Tat Cheung;	Northrop Grumman Systems Corporation	Filed 04/30/12; Issued 09/09/14	Multi-channel fiber laser amplifier combining apparatus including integrated spectral beam combination and a tapered fiber bundle having multiple fiber outputs	NGSC; no Gov't licensee
8,903,209	Eric C. Cheung; Stephen P. Palese;	Northrop Grumman Systems Corporation	Filed 06/26/08; Issued 12/02/14	Spectral beam combining and wavelength multiplexing with an optical redirecting element a beam redirecting element, and combining the beamlets into a single output beam via a second spectrally dispersive element	NGSC; no Gov't licensee
8,922,881	Joshua E. Rothenberg;	Northrop Grumman Systems Corporation	Filed 02/01/13; Issued 12/30/14	Fiber amplifier system including tapered fiber bundle and polarization control	NGSC; no Gov't licensee
7,486,852	Joshua E., Rothenberg;	Northrop Grumman Systems Corporation	07/20/05; Issued 02/03/09	Apparatus and method for suppression of stimulated brillouin scattering in an optical fiber	NGSC; no Gov't licensee
7,436,588	Joshua E. Rothenberg; Robert R. Rice; Michael G. Wickham;	Northrop Grumman Systems Corporation	Filed 10/05/06; Issued 10/14/08	Method and system for hybrid coherent and incoherent diffractive beam combining	NGSC; no Gov't licensee
8,488,235	Joshua Elliott Rothenberg;	Northrop Grumman Systems Corporation	Filed 04/30/12; Issued 07/16/13	Multi-channel fiber laser amplifier combining apparatus including a tapered fiber bundle having multiple fiber outputs	NGSC; no Gov't licensee



8,184,363	Joshua Elliott Rothenberg;	Northrop Grumman Systems Corporation	Filed 8/7/09; Issued 05/22/12	All-fiber integrated high power coherent beam combination	NGSC; no Gov't licensee
7,440,174	Robert Rex Rice; Michael Gordon Wickham; Joshua Elliott Rothenberg;	Northrop Grumman Systems Corporation	Filed 2/24/06; Issued 10/21/08	Coherent fiber diffractive optical element beam combiner	NGSC; no Gov't licensee
7,346,085	Joshua E. Rothenberg; Robert R. Rice; Michael G. Wickham;	Northrop Grumman Systems Corporation	Filed 10/05/06; Issued 03/18/08	Multi-stage method and system for coherent diffractive beam combining	NGSC; no Gov't licensee
8,922,877	G. D. Goodno, S. J. McNaught, P. A. Thielen, J. E. Rothenberg, and M. P. Wacks	Northrop Grumman Systems Corporation	Filed 8/5/13; Issued 12/30/14	Polarization control with mode stability	NGSC; no Gov't licensee
7,948,680	G. D. Goodno	Northrop Grumman Systems Corporation	Filed 12/12/07; Issued 5/24/11	Spectral Beam Combination using Broad-bandwidth Lasers	NGSC; no Gov't licensee

## Q-PEAK DATA PATENT

Patents						
Patent #	Serial / Docket #	Inventor Names	Assignee Names	Filing Date	Patent Title	Ownership and Licensing Rights
5,774,489		Peter Moulton; James Harrison; Robert J. Martisen;	Schwartz Electro- Optics, Inc.	Filed 3/28/96; Issued 6/30/98	Transversely Pumped Solid State Laser	*This patent is 100% owned by Q-peak, Inc. ( Q-peak, Inc. was a wholly owned sub of Schwartz electro-Optics. (SEO)). SEO is now defunct. Q-peak and ALL assets was acquired in 2001, and now a wholly owned subsidiary of Physical Sciences Inc. This patent has not been licensed to any person or Organization.



## NGSC DATA RIGHTS ASSERTION – NONCOMMERCIAL

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

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NONCOMMERCIAL					
#	Technical Data Computer Software to be Furnished with Restrictions	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions	Previously Delivered to the Government
1	Laser phasing approach. IR&D Project Nos. 2003-05; 335110 2002; 324915 1998-2001; 324708	Developed Exclusively at Private Expense	Limited Rights	NGSC	Delivered to the U.S. Army Space and Missile Defense Command (SMDC) with Limited Rights under contract W9113M-05-D-0216
2	Fiber Endcapping and Exit Array lens design. IR&D Project Nos. 2014 14D22800	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
3	Monorail high precision kinematic interface design, including design criteria, specification guidelines, models, drawings, and performance data. IR&D Project Nos. 2009; 10335110	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
4	Ring of Fire precision process for welding of fiber to taper endcap on kinematic carrier, including description, specifications of equipment and parts, criteria for performing process, models, drawings, layouts and data on process performance. IR&D project Nos. 2012; 11473010	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
5	Modular Spectral Beam Combining Design Concept for 100 kW Fiber Laser, including description, trade study, design criteria, specification guidelines, models, drawings, resulting model data, and performance data. IR&D Project Nos. 2014 14D22801	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
6	Spectral Beam Combining Design Concept for 150 kW, including description, layouts, trade study, design criteria, specification guidelines, models, drawings, resulting model data, and performance data. IR&D Project Nos. 2014 14D22801	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
7	Pseudo-random bit sequence design for increased SBS threshold in high power fiber amplifiers, including description, algorithm development, hardware definition and specification, design criteria, model, layouts, resulting model data, and performance data. IR&D Project Nos. 2014 14D22801	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
8	Polarization Control Design for High Power Fiber Amplifiers, including description, design criteria, hardware definition and specification, models, resulting model data, and performance data. IR&D Project Nos. 2014 14D22801	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
9	150 kW Spectral Beam Combiner Design with optics, mounts, thermal management, and layout. IR&D Project Nos. 2014 14D22801	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
10	Specification for a dual voltage and current power supply source for a higher power fiber amplifier. IR&D Project Nos. 2014 14D22801	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
11	Gain switched single frequency diode laser design. IR&D Project No. 2008-474007	Developed Exclusively at Private Expense	Limited Rights	NGSC	No

12	GAMMA Model Wavefront Control System design and all parts making up that assembly, including description, design criteria, specification guidelines, hardware specification, algorithm development, drawings, models, resulting model data, and performance data. IR&D Project No. 2008-2011; 474007	Developed Exclusively at Private Expense	Limited Rights	NGSC	No
13	Wavefront Control Software GAMMA1.00. IR&D Project No. 2008-2011; 474007. Not previously delivered to the Government.	Developed Exclusively at Private Expense	Restricted Rights	NGSC	No
14	Waveform Generator Design - Part Number D460367. IR&D Project No. 2008-2011; 474007.	Developed Exclusively at Private Expense	Limited Rights	NGSC	Delivered to the SMDC with Limited Rights under contract W9113M-05-D-0216
15	Broadband Modulator Driver Design - Part Number E462550. IR&D Project No. 2008-2011; 474007.	Developed Exclusively at Private Expense	Limited Rights	NGSC	Delivered to the SMDC with Limited Rights under contract W9113M-05-D-0216.
16	Maritime Laser Demonstrator - Conceptual Design Model (CoDM) jitter model development, including description, algorithm development, design criteria, and resulting model data; IR&D Project No. 2009-650000.	Developed exclusively at private expense	Limited Rights	NGSC	No
17	Background Information Relating to Fiber Front End - Technique for polarization locking optical outputs relating to but not described in U.S. Patent Number 6,317,257. IR&D Project Nos. 2004-05: 474008 2001-02: 474001 2001-05: 325113	Developed exclusively at private expense	Limited Rights	NGSC	No
18	Background Information Relating to Fiber Front End - distributed feedback laser apparatus for avoiding stimulated Brillouin scattering relating to but not described in U.S. Patent Number 6,678,294. IR&D Project Nos. 2004-05: 474008 2001-02: 474001 2001-05: 325113.	Developed exclusively at private expense	Limited Rights	NGSC	Delivered to the SMDC with Limited Rights under contract W9113M-05-D-0216.
19	Engagement management software. IR&D Project Nos. 2009; 515947.	Developed exclusively at private expense	Restricted Rights	NGSC	No
20	Active Image Processing Software; Acquisition Tracking Control Algorithms; Fast Steering Mirror Control Software. IR&D Project No. 650000.	Developed exclusively at private expense	Restricted Rights	NGSC	No
21	High Power Track Illuminator Laser (HP TILL), modification to the Kineto-Tracking Mount (KTM), and High Power Optical Coatings designs, including descriptions, drawings, hardware definition and specifications, specification guidance, models, resulting model data, layouts, assembly instructions, and performance data.. IR&D Project No. 650000.	Developed exclusively at private expense	Limited Rights	NGSC	No
22	Background information relating to the System for delivering coolant to a laser system relating to but not described in U. S. Patent Number 7,584,628.	Developed exclusively at private expense	Limited Rights	NGSC	No

Date: 18 September 2015

Printed Name and Title: Robyn Bockrath, Manager, MAS Directed Energy Contracts  
Northrop Grumman Aerospace Systems

Signature: 

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data or Computer Software to be Furnished With Restrictions* (LIST)*****	Basis for Assertion** (LIST)	Asserted Rights Category*** (LIST)	Name of Person Asserting Restrictions***** (LIST)
High power/high energy OPO Design IR&D 2001	Mixed funding	Government purpose rights	Q-peak, Inc.
Eyesafe Shortwave Infrared Source using ring optical parametric oscillators IR&D 1995,2006	Mixed funding	Government purpose rights	Q-peak, Inc.
High power, tunable SS blue laser using ring optical parametric oscillators IR&D 2006-2009	Mixed funding	Government purpose rights	Q-peak, Inc.

\*For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

\*\*Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

\*\*\*Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

\*\*\*\*Corporation, individual, or other person, as appropriate.

\*\*\*\*\*Enter "none" when all data or software will be submitted without restrictions.

Date

17 SEPT 2015

Printed Name and Title

B. David Green, President

Signature

(b) (6)

(End of identification and assertion)

(c) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.

(f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

(End of provision)

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data or Computer Software		Data Previously		
to be Furnished	Basis for	Asserted Rights	Name of Person	Delivered
With Restrictions*	Assertion**	Category***	Asserting	to the
(LIST)*****	(LIST)	(LIST)	Restrictions*****	Government
Pre-Amplifier Design	Developed Exclusively at Private Expense	Limited Rights	Nufern	Delivered to Defense Prime Contractor with Limited Rights under JHPSSL Contract# W9113M-05-C- 0216. Delivered to Defense Prime Contractor with Limited Rights under RELI Contract #W9113M-10-C- 002. Delivered to MIT-LL under limited rights under Excalibur Program 8000003684
IR&D Project No. 19411/10 (2008- 2015)				
Multi-Mode Combiner Design	Developed Exclusively at Private Expense	Limited Rights	Nufern	Delivered to MIT- LL under limited rights under Excalibur Program 8000003684
IR&D Project No. 14608/10 (2010- 2014)				
LMA Fiber Design	Developed Partially at Private Expense	Government Purpose Rights	Nufern	Delivered to Defense Prime Contractor with Government Purpose Rights under JHPSSL Contract #
IR&D Project No. 17806/10 (2010- 2015)				



				W9113M-05-C-0216. Delivered to Defense Prime Contractor with Government Purpose Rights under REL1 Contract #W9113M-10-C-002. Delivered to MIT-LL under government purpose rights under Excalibur Program 8000003684. Delivered to Defense Prime Contractor with Government Purpose Rights under APPL contract #FA8650-05-C-7211
Remote High Power Engine Design	Developed Partially at Private Expense	Government Purpose Rights	Nufern	Delivered to MIT-LL with Government purpose rights under Excalibur Program 8000003684.
IR&D Project No. 19355/10 (2010-2015)				
Cladding Stripper Design	Developed Exclusively at Private Expense	Limited Rights	Nufern	Delivered to Defense Prime Contractor with Restricted Rights under JHPSSL Contract #W9113M-05-C-0216. Delivered
IR&D Project No. 19355/10 (2010-2015)				

to Defense Prime  
Contractor with  
Restricted Rights  
under RELI  
Contract  
#W9113M-10-C-  
002. Delivered to  
MIT-LL with  
Restricted rights  
under Excalibur  
Program  
8000003684.  
Delivered to  
Defense Prime  
Contractor with  
Restricted Rights  
under APPL  
contract  
#FA8650-05-C-  
7211

\*For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

\*\*Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

\*\*\*Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

\*\*\*\*Corporation, individual, or other person, as appropriate.

\*\*\*\*\*Enter "none" when all data or software will be submitted without restrictions.

Date September 17, 2015

Printed Name and Title Anthony Rallo, Esq.

Legal

Signature

(End of identification and assertion)

(e) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.

(f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

(End of provision)

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data or Computer Software to be Furnished With Restrictions* (LIST)*****	Basis for Assertion** (LIST)	Asserted Rights Category*** (LIST)	Name of Person Asserting Restrictions**** (LIST)
Wavefront sensing and image processing software, Adaptive Optics System ("AOS") BASE libraries.  IRAD Project Nos. RD04-803, 7520-806, 810, 814-816, 819, 821, 823-825.  Previously delivered with restricted rights to the Government with JHPSSL-3 Contract W9113M-05-C-0216 hardware.	Developed by AOA Xinetics exclusively at private expense	Restricted Rights	Adaptive Optics Associates, Inc.
Adaptive Optics System (Model)  IRAD Project Nos. RD04-802, 804, 7250-802, 820, 822.  Not previously delivered with restricted rights to the Government.	Developed by AOA Xinetics exclusively at private expense	Restricted Rights	Adaptive Optics Associates, Inc.
Wavefront sensing techniques  IR&D Project Nos. RD04-803, 7520-806, 810, 814-816, 819, 821, 823-825.  Previously delivered with restricted rights to the Government with JHPSSL-3 Contract W9113M-05-C-0216 hardware.	Developed by AOA Xinetics exclusively at private expense	Restricted Rights	Adaptive Optics Associates, Inc.

Wavefront sensing algorithms	Developed by AOA Xinetics exclusively at private expense	Restricted Rights	Adaptive Optics Associates, Inc.
IR&D Project Nos. RD04-803, 7520-806, 810,814-816, 819, 821,823-825.			
Previously delivered with restricted rights to the Government with JHPSSL-3 Contract W9113M-05-C-0216 hardware.			
Modal reconstruction and control loop algorithms	Developed by AOA Xinetics exclusively at private expense	Restricted Rights	Adaptive Optics Associates, Inc.
IR&D Project Nos. RD04-801-804, 7520-801-802, 804, 806, 809-811, 814-816, 819-825.			
Previously delivered with restricted rights to the Government with JHPSSL-3 Contract W9113M-05-C-0216 hardware.			

\*For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

\*\*Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

\*\*\*Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

\*\*\*\*Corporation, individual, or other person, as appropriate.

\*\*\*\*\*Enter "none" when all data or software will be submitted without restrictions.

Date 17 September 2015  
Printed Name and Title Richard Kline / Manager, Contracts  
Signature (b) (5)

(End of identification and assertion)

(e) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.

(f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

(End of provision)

**NGAS STM297.RFP.SCP.15-8, L-3 Brashear DWY-15-050**

**252.227-7017 Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data or Computer Software**

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data or Computer Software to be Furnished with Restrictions	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
Design and Analysis for Unobscured Beam Expander	Developed Exclusively at Private Expense, IRAD program R0902, conducted 2009 - 2010 Date of first USG use: 2014	Limited Rights	L-3 Brashear
Optical Processes and Methods	Developed Exclusively at Private Expense, IRAD program R1102 conducted in 2011, among others, Date of first USG use: pre-1990	Limited Rights	L-3 Brashear
Bonding Procedures	Developed Exclusively at Private Expense, IRAD program R0402 conducted in 2004 plus numerous standard process and procedure documents, Date of first USG use: pre-1990	Limited Rights	L-3 Brashear
Internal Assembly and Manufacturing Procedures	Developed Exclusively at Private Expense, numerous standard process and procedure documents, Date of first USG use: pre-1990	Limited Rights	L-3 Brashear
Gimbal and Focus Control Dynamic Filter Software Source Code	Developed Exclusively at Private Expense, developed under Stock Job T915 supported two USG and one foreign commercial sale. Date of first USG use: 1999	Restricted Rights	L-3 Brashear
Executable (Compiled) Gimbal and Focus Control Software	Developed Partially at Private Expense, multiple IRAD programs included R304 conducted 2003. Date of first USG use: 1999	Government Purpose Rights	L-3 Brashear

Date 23 September 2015

Printed Name and Title Dave Yodens  
Contract/Subcontract Manager

Signature

(b) (6)

(End of identification and assertion)

The Offeror asserts for itself, or the persons identified below, that the Government's rights to use, release, or disclose the following technical data or computer software should be restricted:

Technical Data or Computer Software to be Furnished With Restrictions* (LIST)*****	Basis for Assertion** (LIST)	Asserted Rights Category*** (LIST)	Name of Person Asserting Restrictions**** (LIST)
Executable files for computer software implementing tracking algorithms for performing image based object tracking (coarse tracking) and image based aim point maintenance (fine tracking).	The Tracking Algorithms embedded in the files were developed exclusively at Private Expense  The executable files and software were derived from SBIR contract No. N00024-06-C-4118, Expiring April 30, 2021	Restricted Rights  SBIR Data Rights	Lawrence B. Wolff Equinox Corporation
Executable files for computer software implementing I/O for object target tracking and/or aim point maintenance respective to camera image data, display and user interface	The executable files and software were derived from SBIR contract No. N00024-06-C-4118, Expiring April 30, 2021	SBIR data rights	Lawrence B. Wolff Equinox Corporation

\*For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

\*\*Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not



accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

\*\*\*Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specially negotiated licenses).

\*\*\*\*Corporation, individual, or other person, as appropriate.

\*\*\*\*\*Enter "none" when all data or software will be submitted without restrictions.

Date \_\_\_\_\_ September 22, 2015 \_\_\_\_\_  
Printed Name and Title \_\_\_\_\_ Lawrence B. Wolff \_\_\_\_\_  
\_\_\_\_\_ President \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Signature \_\_\_\_\_

(End of identification and assertion)

(e) An offeror's failure to submit, complete, or sign the notification and identification required by paragraph (d) of this provision with its offer may render the offer ineligible for award.

(f) If the Offeror is awarded a contract, the assertions identified in paragraph (d) of this provision shall be listed in an attachment to that contract. Upon request by the Contracting Officer, the Offeror shall provide sufficient information to enable the Contracting Officer to evaluate any listed assertion.

(End of provision)

<b>DEPARTMENT OF DEFENSE</b> <b>CONTRACT SECURITY CLASSIFICATION SPECIFICATION</b> <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)</i>				<b>1. CLEARANCE AND SAFEGUARDING</b> <span style="float: right;"><b>SER:004-15</b></span> a. FACILITY CLEARANCE REQUIRED <div style="text-align: center;"><b>SECRET</b></div> b. LEVEL OF SAFEGUARDING REQUIRED <div style="text-align: center;"><b>SECRET</b></div>	
<b>2. THIS SPECIFICATION IS FOR: (X and complete as applicable)</b>				<b>3. THIS SPECIFICATION IS: (X and complete as applicable)</b>	
<input checked="" type="checkbox"/> a. PRIME CONTRACT NUMBER <div style="text-align: center;">N00014-16-C-1009</div>		<input checked="" type="checkbox"/> a. ORIGINAL (Complete date in all cases) <div style="text-align: center;">DATE (YYYYMMDD) 20151014</div>			
b. SUBCONTRACT NUMBER		b. REVISED (Supersedes all previous specs)		REVISION NO. DATE (YYYYMMDD)	
c. SOLICITATION OR OTHER NUMBER <div style="text-align: center;">BAA15-0005</div>		DUE DATE (YYYYMMDD)		c. FINAL (Complete Item 5 in all cases) DATE (YYYYMMDD)	
<b>4. IS THIS A FOLLOW-ON CONTRACT?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract.					
<b>5. IS THIS A FINAL DD FORM 254?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: In response to the contractor's request dated _____, retention of the classified material is authorized for the period of _____.					
<b>6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)</b>					
a. NAME, ADDRESS, AND ZIP CODE NORTHROP GRUMMAN SYSTEMS CORP. ONE SPACE PARK REDONDO BEACH, CA 90278		b. CAGE CODE <div style="text-align: center;">11982</div>		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) DEFENSE SECURITY SERVICE (IOFWL) 3452 E. FOOTHILL BLVD. SUITE 600 PASADENA, CA 91107	
<b>7. SUBCONTRACTOR</b>					
a. NAME, ADDRESS, AND ZIP CODE		b. CAGE CODE		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)	
<b>8. ACTUAL PERFORMANCE</b>					
a. LOCATION		b. CAGE CODE		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)	
<b>9. GENERAL IDENTIFICATION OF THIS PROCUREMENT</b> Solid State, High Power Laser Weapon System Demonstrator (LWSD) Design, Development and Demonstration for Surface Navy, USN					
<b>10. CONTRACTOR WILL REQUIRE ACCESS TO:</b>					
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION		YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	
b. RESTRICTED DATA		<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
d. FORMERLY RESTRICTED DATA		<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
e. INTELLIGENCE INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. PERFORM SERVICES ONLY	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
(1) Sensitive Compartmented Information (SCI)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
(2) Non-SCI		<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
f. SPECIAL ACCESS INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. REQUIRE A COMSEC ACCOUNT	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
g. NATO INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. HAVE TEMPEST REQUIREMENTS	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
h. FOREIGN GOVERNMENT INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
i. LIMITED DISSEMINATION INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
j. FOR OFFICIAL USE ONLY INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	l. OTHER (Specify)	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
k. OTHER (Specify)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	11.g Submit request to official listed in 16.a	
<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>		

**12. PUBLIC RELEASE.** Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release ☒ Direct ☐ Through (Specify)

Office of Naval Research, Peter A. Morrison, Code 35, One Liberty Center, 875 North Randolph Street, Arlington VA 22203-1995

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)\* for review  
\*In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

**13. SECURITY GUIDANCE.** The security classification guidance needed for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.)

Information Generated under this contract shall be classified in accordance with:

- OPNAVINST 5513.8 SCG ID# 08-003.01 Unclassified ECM/ECCM, General 2/15/1989
- OPNAVINST 5513.8 SCG ID# 08-007.03 Unclassified Laser Weapon Systems and Technology 4/9/2013
- OPNAVINST 5513.8 SCG ID# 08-054.01 Unclassified Electromagnetic Environmental Effects (E-3) Program 4/6/2011 (Admin Update 3/29/2013)
- OPNAVINST 5513.8 SCG ID# 08-066.02 Unclassified Combat Optical Countermeasure Systems (COCMS) 6/18/2010
- OPNAVINST 5513.8 SCG ID# 08-079.04 Unclassified AN/SPQ-9B Anti-Ship Missile Defense (ASMD) Radar Set 5/4/2011
- OPNAVINST 5513.8 SCG ID# 08-086.1 Unclassified Aircraft Infrared Measurements 11/25/2009
- OPNAVINST 5513.8 SCG ID# 08-091.01 Unclassified AN/AAR-59 Joint and Allied Threat Awareness System 08/20/2012
- OPNAVINST 5513.8 SCG ID# 08-092.01 Unclassified Free Electron Laser Innovative Navy Prototype 2/15/2012
- OPNAVINST 5513.8 SCG ID# 08-093.01 Unclassified Maritime Laser Demonstration Program 2/15/2012
- OPNAVINST 5513.8 SCG ID# 08-110 Unclassified High Energy Fiber Laser Further Naval Capability Product (HEFL FNC) 11/25/2013
- OPNAVINST 5513.8 SCG ID# 08-115 Unclassified AN/SEQ-3 (XN-1) Laser Weapon system 4/25/2014

Additionally all classified material derived from other classified sources will perpetuate the highest classification and any special caveats pertaining thereto.

-----SEE CONTINUATION PAGE-----

**14. ADDITIONAL SECURITY REQUIREMENTS.** Requirements, in addition to ISM requirements, are established for this contract. ☒ Yes ☐ No  
(If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.)

The contractor shall conform to NAVCENT OPSEC requirements for processing data of the USS PONCE deployment of laser weapon, or using SSL-QRC program information. TEMPEST countermeasures shall be used in weapon console and for processing performance data. COMSEC support for cryptographic products related to STU/STE comm keys required to safeguard of classified technical and programmatic information.

**15. INSPECTIONS.** Elements of this contract are outside the inspection responsibility of the cognizant security office ☐ Yes ☒ No  
(If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.)

**16. CERTIFICATION AND SIGNATURE.** Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL

Torri Powell (torri.powell@navy.mil)

b. TITLE

Contracting Officer for Security Matters

c. TELEPHONE (Include Area Code)

(703) 696-8177

d. ADDRESS (Include Zip Code)

Office of Naval Research  
One Liberty Center, 875 N. Randolph Street  
Arlington, VA 22203-1995

**17. REQUIRED DISTRIBUTION**

- ☒ a. CONTRACTOR
- ☐ b. SUBCONTRACTOR
- ☒ c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
- ☐ d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
- ☒ e. ADMINISTRATIVE CONTRACTING OFFICER
- ☒ f. OTHERS AS NECESSARY ONR 35, 43, 25

## Additional Performance Locations:

Naval Surface Warfare Center  
Dahlgren Division  
Attn: Stuart Shoppell, Code E11  
6146 Tisdale Road, Suite 237  
Dahlgren, VA 22448

Naval Air Warfare Center  
Weapons Division  
Attn: Roxanne Diaz, Code J17000E  
575 I Ave., Suite 1  
Point Mugu, CA 93042

Naval Surface Warfare Center  
Port Hueneme Division  
4363 Missile Way  
Port Hueneme, CA 93043

Northrop Grumman Systems Corporation (NGES)  
21240 Burbank Blvd.  
Woodland Hills, CA 91367  
CAGE Code: 06481

Northrop Grumman Systems Corporation  
One Space Park  
Redondo Beach, CA 90278  
CAGE Code: 11982

- 10.a & 11.h: Contractor is authorized the use of COMSEC equipment; access to classified COMSEC information requires a final U.S. Government clearance at the appropriate level.

- Item 10.e (2): Access to Non-SCI information requires a need-to-know and a final U.S. Government clearance commensurate with the level of this contract. Prime contractor shall submit a written request to release Intelligence Information to the official listed in Item 16.a

- Item 10.j: For Official Use Only (FOUO) distributed during the task only identifies unclassified DoD information that is exempt from public disclosure. It must not be given general circulation without receiving public release authority from the Sponsor. FOUO is not a classification marking and shall be safeguarded as specified in Enclosure 3 to DoD 5200.01 Manual, Volume 4.

- 11.c: Only IS's approved by DSS shall be used to generate classified information.

1. Document preparation and distribution shall be only as prescribed by the Program Officer
2. Forward copies of any subcontractor DD254's issued incident to this contract to the official shown in item 16.a below.
3. The attached Intelligence Information and FOUO Information Sheets are hereby made a part of this DD 254.
4. To obtain document/information, send requests to the official shown in Item 16.a below.

Office of Naval Research,  
Attn: Peter Morrison, SSL Program Officer ONR 35  
OLC, 875 N. Randolph St., Arlington, VA 22203  
E-mail: peter.a.morrison@navy.mil

**"FOR OFFICIAL USE ONLY" (FOUO) INFORMATION SHEET"****1. General**

a. The "For Official Use Only" (FOUO) marking is assigned to information at the time of its creation by a DoD Agency. It is not authorized as a substitute for a security classification marking but is used on official government information that may be withheld from the public under exemptions 2 through 9 of the Freedom of Information Act.

b. Use of the FOUO marking does not mean that the information cannot be released to the public, only that it must be reviewed by the Government prior to its release to determine whether a significant and legitimate government purpose is served by withholding the information or portions of it.

**2. Identification Markings**

a. An unclassified document containing FOUO information will be marked "For Official Use Only" at the bottom of the front cover (if any), on the first page, on each page containing FOUO information, on the back page, and on the outside of the back cover (if any). No portion markings will be shown.

b. Within a classified document, an individual page that contains both FOUO and classified information will be marked at the top and bottom with the highest security classification of information appearing on the page. If an individual portion contains FOUO information but no classified information, the portion will be marked "FOUO."

c. Any "For Official Use Only" information released to a contractor by a DoD Agency is required to be marked with the following statement prior to transfer:

**This document contains information EXEMPT FROM MANDATORY DISCLOSURE under the FOIA. Exemption(s) \_\_\_\_\_ apply.**

d. Removal of the "For Official Use Only" marking can only be accomplished by the originator or other competent authority. When the "For Official Use Only" status is terminated, all known holders will be notified to the extent practical.

3. Dissemination. Contractors may disseminate "For Official Use Only" information to their employees and subcontractors who have a need for the information in connection with a classified contract.

4. Storage. During working hours, "For Official Use Only" information shall be placed in an out-of-sight location if the work area is accessible to persons who do not have a need for the information. During nonworking hours, the information shall be stored to preclude unauthorized access. Filing such material with other unclassified records in unlocked files or desks is adequate when internal building security is provided during nonworking hours. When such internal security control is not exercised, locked buildings or rooms will provide adequate after-hours protection or the material can be stored in locked receptacles such as file cabinets, desks, or bookcases.

5. Transmission. "For Official Use Only" information may be sent via first-class mail or parcel post. Bulky shipments may be sent by fourth-class mail.

6. Disposition. When no longer needed, FOUO information may be disposed of by tearing each copy into pieces to preclude reconstructing, and placing it in a regular trash container or as directed by the DoD Agency.

7. Unauthorized Disclosure. Unauthorized disclosure of "For Official Use Only" information does not constitute a security violation but the releasing agency should be informed of any unauthorized disclosure. The unauthorized disclosure of FOUO information protected by the Privacy Act may result in criminal sanctions.

**INTELLIGENCE INFORMATION SHEET**

1. The material does not become the property of the contractor and may be withdrawn at any time. Upon expiration of the contract, all intelligence released and any material using data from the intelligence will be returned to the releasing contracting command or activity [Chief of Naval Research (ONR 43)] for final disposition unless retention is authorized. The contracting command or activity [Chief of Naval Research (ONR 43)] will provide a copy of the retention authorization to ONI-5.
2. Contractors will not release the intelligence material to any activity or person of the contractor's organization not directly engaged in providing services under the contract or to another contractor (including sub-contractors), government agency, private individual, or organization without prior approval of the originator of the material, as outlined in governing directives, and prior approval and certification of need-to-know by the designated project manager/contract sponsor [Chief of Naval Research (ONR 43)].
3. Intelligence material will not be released to foreign nationals or immigrant aliens who may be employed by the contractor, regardless of the level of their security clearance or access authorization, except with the specific permission of ONI-5 requested via the Chief of Naval Research (ONR 43).
4. Intelligence material will not be reproduced without prior approval of the originator. All intelligence material shall bear a prohibition against reproduction while in the custody of the contractor.
5. Contractors will maintain records which will permit them to furnish, on demand, the names of individuals who have access to intelligence material in their custody.